

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A communication system, comprising:
a receiving unit; ~~and~~
a transmitting unit operatively coupled to the receiving unit via a first channel, the transmitting unit being configurable to transmit a first data stream to the receiving unit in the first channel, the first data stream containing communications data and control data, wherein the transmitting unit transmits the first data stream so that communications data is transmitted in a grouping that complies with an asynchronous protocol and the control data is transmitted within a segment of the first data stream that is specified as unused for communications data according to the asynchronous protocol[.];

wherein the receiving unit extracts communications data from the grouping in the first data stream and extracts control data from the segment in the first data stream;
and

a device coupled to the receiving unit, wherein the device is configured to exchange communications data with the receiving unit over a second channel in a second data stream conforming to the asynchronous protocol.

2. (Original) The communication system of claim 1 wherein the asynchronous protocol conforms to an Ethernet standard and the grouping is an Ethernet compliant frame.

3. (Original) The communication system of claim 1 wherein the segment includes an inter-frame gap according to the asynchronous protocol.

4. (Original) The communication system of claim 1 wherein the segment includes an idle period according to the asynchronous protocol.

5. (Original) The communication system of claim 1 wherein the first channel is a free space optical system.

6. (Canceled)

7. (Currently Amended) The communication system of claim ~~6~~ 1 wherein the receiving unit includes

- a first interface unit coupled to the first channel;
- a controller unit coupled to the first interface unit; and
- a second interface unit coupled to the second channel.

8. (Original) The communication system of claim 7 wherein the controller unit includes:

- a first processor to process control data; and
- a second processor coupled to the first processor and the first interface unit, wherein the second processor is capable of transferring control data between the first interface unit and the first processor.

9. (Original) The communication system of claim 8 wherein the second processor is further capable of transferring control data between the second interface unit and the first processor.

10. (Original) The communication system of claim 8 wherein the second processor is further capable of transferring communications data between the first and second interface units.

11. (Original) The communication system of claim 7 wherein the first interface unit is capable of transmitting an optical signal via free space.

12. (Original) The communication system of claim 11 wherein the second channel is a wired channel.

13. (Currently Amended) A method for use in a communication system, the communication system having a first channel to support transmission according to an asynchronous protocol, the method comprising:

detecting a first segment in a first data stream to be transmitted in the first channel, wherein the first segment is specified as unused for communications data according to the asynchronous protocol **and wherein the first data stream includes communications data transmitted in a grouping of the first data stream that complies with the asynchronous protocol; and**

transmitting the first data stream in the first channel, wherein the first data stream includes control data being transmitted within the first segment[.];

receiving a second data stream from the first channel, the second data stream containing control data and communications data, the communications data being in a first grouping that complies with the asynchronous protocol and the control data being in a second segment that is specified as being unused for data according to the asynchronous protocol;

extracting control data from the second segment;

extracting the communications data from the first grouping; and

transmitting in a second channel the extracted communications data in a second grouping that complies with the asynchronous protocol.

14. (Canceled)

15. (Currently Amended) The method of claim ~~14~~ **13** wherein the asynchronous protocol conforms to an Ethernet standard and the grouping is a frame according to the Ethernet standard.

16. (Original) The method of claim 15 wherein the first segment is an inter-frame gap according to the asynchronous protocol.

17. (Original) The method of claim 15 wherein the first segment is an idle period.

18. (Canceled)

19. (Original) The method of claim 18 wherein the asynchronous protocol conforms to an Ethernet standard, the second grouping is a frame according to the Ethernet standard and the second segment is an inter-frame gap according to the Ethernet standard.

20. (Original) The method of claim 18 wherein the asynchronous protocol conforms to an Ethernet standard, the second grouping is a frame and the second segment is an idle period according to the Ethernet standard.

21. (Currently Amended) An apparatus for use in a communication system, the communication system having a first channel to support transmission according to an asynchronous protocol, the ~~method~~ **apparatus** comprising:

means for detecting a first segment in a first data stream to be transmitted in the first channel, wherein the first segment is specified as unused for data according to the asynchronous protocol; ~~and~~

means for transmitting the first data stream in the first channel, wherein the first data stream includes control data being transmitted within the first segment[[]];

means for receiving a second data stream from the first channel, the second data stream containing control data and communications data, the communications data being in a first grouping that complies with the asynchronous protocol and the control data being in a second segment that is specified as being unused for data according to the asynchronous protocol;

means for extracting control data from the second segment;

means for extracting the communications data from the first grouping; and

means for transmitting in a second channel the extracted communications data in a second grouping that complies with the asynchronous protocol.

22. (Original) The apparatus of claim 21 wherein the first data stream includes communications data transmitted in a grouping of the first data stream that complies with the asynchronous protocol.

23. (Original) The apparatus of claim 22 wherein the asynchronous protocol conforms to an Ethernet standard and the grouping is a frame according to the Ethernet standard.

24. (Original) The apparatus of claim 21 wherein the first segment is an inter-frame gap according to the asynchronous protocol.

25. (Original) The apparatus of claim 21 wherein the first segment is an idle period according to the asynchronous protocol.

26-50. (Canceled)